(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 April 2002 (11.04.2002)

PCT

(10) International Publication Number
WO 02/29228 A1

(51) International Patent Classification[7]: F02D 33/02, F02B 37/22, F02D 23/02

(21) International Application Number: PCT/JP01/07695

(22) International Filing Date:
5 September 2001 (05.09.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2000-306484 5 October 2000 (05.10.2000) JP
2000-311096 11 October 2000 (11.10.2000) JP

(71) Applicant *(for all designated States except US)*: **NISSAN MOTOR CO., LTD.** [JP/JP]; 2, Takara-cho, Kanagawa-ku, Yokohama-shi, Kanagawa 221-0023 (JP).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **SHIRAKAWA, Takashi** [JP/JP]; 2-92, Urago-cho, Yokosuka-shi, Kanagawa 237-0062 (JP).

(74) Agent: **GOTO, Masaki**; Shoyu-Kaikan, 3-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-0013 (JP).

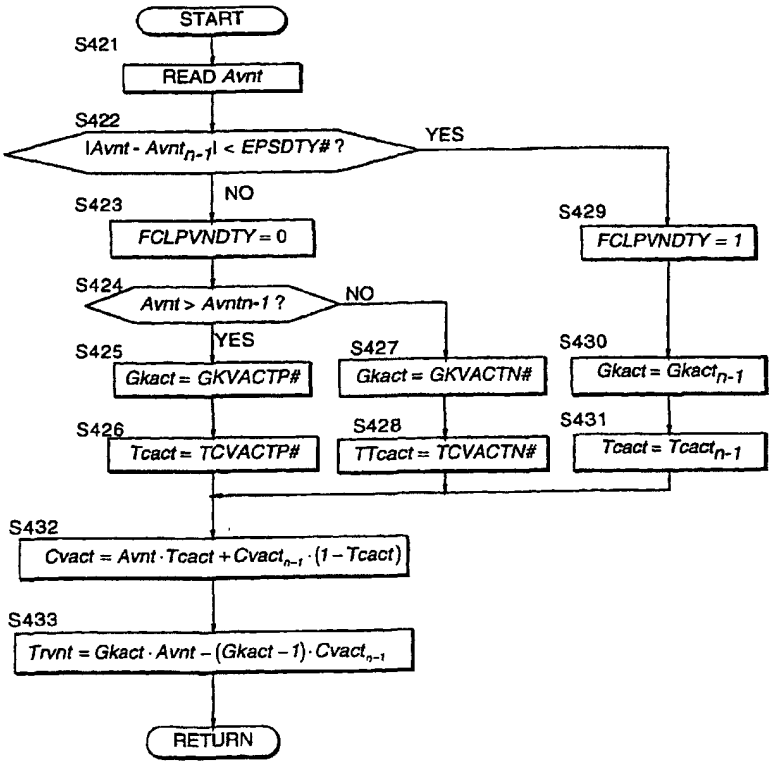
(81) Designated States *(national)*: CN, KR, US.

(84) Designated States *(regional)*: European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

[Continued on next page]

(54) Title: CONTROL OF SUPERCHARGER



(57) Abstract: An engine (1) is provided with a turbocharger (50) which varies a supercharging pressure by an actuator (53, 54, 55, 56). A controller (41) respectively calculates a first compensation value of a response delay from operation of the actuator (54) to variation of an intake air amount of the engine (1), and a second compensation value of an operating delay of the actuator (54) with respect to an input of a command signal to the actuator (54). The command signal to the to the actuator (54) is calculated by performing a processing based on the first compensation and the second compensation value on an operational target value that was determined based on the running state of the engine (1), and the response of intake air amount control is thereby enhanced.

WO 02/29228 A1